

## CORRELATES OF PROFILE AND ATTITUDE OF YOUTH TOWARDS FARMING

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### ABSTRACT

*In the present study the relationship between profile characteristics of youth in farming and the attitude towards farming is discussed. The results revealed that the computed 'r' values of education and exposure to training were positively significant with their attitude towards farming at 0.05 level of significance. Annual income, mass media exposure, decision making ability, innovativeness, scientific orientation, management orientation, achievement motivation, economic orientation and risk orientation of youth in farming were positively significant with their attitude at 0.01 level of significance. On the other side the variables like marital status, family type, farm size, material possession and extension contact were found to be non significantly related with the attitude of youth towards farming, whereas age and farming experience were negatively non significant with the attitude of youth towards farming at 0.05 level of significance. The multiple regression analysis revealed that, out of the seventeen variables, annual income and economic orientation had shown positive significant contribution with the dependent variable 'attitude of youth towards farming' at 0.01 level, whereas variables like farm size, decision making ability, innovativeness and achievement motivation had shown positively significant contribution at five per cent level.*

**KEYWORDS:** Youth in Farming, Attitude of Youth towards Farming, Correlation Coefficient, Multiple Linear Regression & Relationship

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## INTRODUCTION

Youth power has been a buzz word that has captivated the minds of the intelligentsia since a long time. Youth is often understood to be the period of transition from childhood to adulthood, encompassing processes of sexual maturation and growing social and economic autonomy from parents and careers (Bennell, 2007). In our country youth constitute a numerically dominant potential, resourceful and also adventurous segment of the population. More than 50.00 per cent of India's current population is below the age of 25 years and over 65.00 per cent below the age of 35 years. Majority of them live in rural areas. The population in the age group of 15-34 years increased from 351 million in 2001 to 430 million in 2011. Current predictions suggest a steady increase in the youth population to 464 million by 2021. By 2020, India set to become the world's youngest country with 64.00 per cent of its population in the working age group (The Hindu, 2013). Attracting and retaining youth in farming is the major challenge ahead to many intellectuals and policymakers globally. In India the mammoth number of youth demography must be capitalized and their dynamic energies, inherent innovativeness, fast grasping power etc., must be identified and channelized towards upbringing of the farming community.

Anamica and Ravichandran (2014) indicated that, involvement in farming ( $r=0.269$ ), income expectancy ( $r=0.473$ ) showed positive and significant relationship with the attitude of rural youth towards farming at one per cent level. The age ( $r=-0.268$ ), education ( $r=-0.260$ ) and risk orientation ( $r=-0.273$ ) exhibited negative and significant relationship at one per cent level. However farm size ( $r=-0.031$ ) and achievement motivation ( $r=0.053$ ) depicted their non significant relationship with the attitude of rural youth towards agriculture. Umunnakwe *et al.* (2014) reported that, there was a significant positive effect of marital status on rural youth involvement in agricultural income generating activities. There was a significant negative influence of respondents' education on rural youth involvement in agricultural income generating activities. There was a significant positive effect of innovativeness on involvement in agricultural income generating activities. As mass media exposure of rural youth increased there was a significant positive influence on their involvement in agricultural income generating activities. The extension contact was positively related to involvement of rural youth in agricultural income generating activities. Umunnakwe and Adedamola (2015) found that, marital status ( $r=0.175^{**}$ ) and family type ( $r=0.179^{**}$ ) was found to be positively related to participation in livelihood activities among rural youth. Their educational level ( $r=0.002NS$ ) had no significant relationship with their involvement in livelihood activities. It is the need of the hour to find out the profile characteristics of youth in farming which influences their attitude towards farming. Hence the present study was taken up with an objective to find out the relationship between selected profile characteristics of youth in farming and their attitude towards farming.

## MATERIALS AND METHODS

The present study was conducted during 2015. Ex post facto research design was followed in the present investigation. The lottery method of simple random sampling procedure was followed to select the sample size. The Andhra Pradesh state was chosen as the locale of the study. One district from each region was selected, thus constituting to a total of three districts. The selected districts were Kurnool (from Rayalaseema region), Nellore (from Coastal region) and Vizianagaram (from North Coastal region). Four mandals from each district were selected, constituting to a total of twelve mandals. Two villages from each mandal were selected, making a total of twenty four villages. From each of the selected village, ten youth in farming were selected, thus constituting to a total of 240 respondents. The Co-efficient of Correlation and Multiple Linear Regression Analysis were carried out to find out the relationship between independent and dependent variables.

### Co-efficient of Correlation (r)

It was calculated to test the relationship between certain independent variables and dependent variable. The formula used for the calculation of co-efficient of correlation is given below. The 'r' calculated value was compared with 'r' table value for (n-2) degree of freedom. If the 'r' calculated value was greater than or equal to 'r' table value, the null hypothesis was rejected, otherwise it was accepted and conclusions were drawn accordingly.

$$r = \frac{\sum xy - \frac{(\sum x)(\sum y)}{n}}{\sqrt{\sum x^2 - \frac{(\sum x)^2}{n}} \sqrt{\sum y^2 - \frac{(\sum y)^2}{n}}}$$

where,

r = Coefficient of Correlation between x and y

$\Sigma x$	=	Sum of scores of variables x
$\Sigma y$	=	Sum of scores of variables y
$\Sigma x^2$	=	Sum of squares of variables x
$\Sigma y^2$	=	Sum of squares of variables y
$(\Sigma x)^2$	=	Squares of sum of variables x
$(\Sigma y)^2$	=	Squares of sum of variables y
$\Sigma xy$	=	Sum of scores of variables x
n	=	Size of the sample

The 'r' calculated value was verified for its significance to use r table value for 5percent and 1 percent level of significance at (n-2) degrees of freedom. When the 'r' calculated value was equal or greater than the table value, the relationship between the selected variables was considered significant otherwise it was considered as non-significant.

### Multiple Regression Analysis

To find out the functional relationship between dependent and the independent variables, multiple regressions analysis was used.

The following is the general formula of multiple regression equation

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + U$$

Where,

Y	=	Dependent variable
$\beta_0$	=	Intercept
$X_1$ to $X_n$	=	Independent variables
$\beta_1$ to $\beta_n$	=	Partial regression co-efficient

Y= Dependent variable

$\beta_0$ = Intercept

$X_1$  to  $X_n$ = Independent variables

$\beta_1$  to  $\beta_n$ = Partial regression co-efficient

### Operational definition of Youth in Farming

Youth in farming was operationalised as, a farmer who was been in farming since three years and having below 35 years of age.

## RESULTS AND DISCUSSIONS

**Table 1: Relationship between Profile Characteristics and Attitude of Youth Towards Farming N=240**

S. No.	Profile Characteristics	'R' Value
1.	Age	-0.09 NS
2.	Education	0.14*
3.	Marital Status	0.09 NS
4.	Family Type	0.12 NS
5.	Farming Experience	-0.08 NS
6.	Farm Size	0.07 NS
7.	Material Possession	0.07 NS
8.	Annual Income	0.23**
9.	Exposure to Training	0.14*
10.	Extension Contact	0.13 NS
11.	Mass Media Exposure	0.22**
12.	Decision Making Ability	0.18**
13.	Innovativeness	0.41**
14.	Scientific Orientation	0.43**
15.	Management Orientation	0.39**
16.	Achievement Motivation	0.19**
17.	Economic Orientation	0.54**
18.	Risk Orientation	0.31**

Significant at 0.01 level \*Significant at 0.05 level NS- Non-significant

From the table 1, it is evident that co-efficient of correlation ( $r = -0.09$ ) between age and attitude of the youth towards farming was found to be negative and non significant at 0.05 level of significance. Youth in farming of all the groups might have similar ways of thinking and might be perceiving farming in reasonably uniform magnitude of different attributes of farming.

The computed 'r' value (0.14) between education and attitude of the respondents was found to be positive and significantly related. With higher education, youth in farming might be exploring all the possible opportunities to succeed in farming.

It also might have helped in enriching their knowledge and skills for attaining better productivity and profitability. In this direction highly educated youth might be more efficient in taking up their farming which in turn resulted in positive attitude. On the other side farmers with less education might be adopting the technologies by following the practices as done by their neighbouring farmers resulted in poor yields. The findings were similar with the study of Uddin *et al.* (2008). But it was against the findings of Umunnakwe and Adedamola (2015).

The co-efficient of correlation ( $r=0.09$ ) between marital status and attitude of the respondents was less than the table value of 'r' at 0.05 level of significance. Hence, it could be inferred that there was positive and non significant relationship between marital status and attitude of the youth towards farming.

The computed 'r' value (0.12) between family type and attitude of the respondents was less than the table value of 'r' at 0.05 level of significance. It could be inferred that there was no significant relationship between family type and attitude of the youth towards farming. Whatever may be the type of family, the youth in farming might have developed similar trend of attitude towards farming. The situational factors might have contributed for the variations among the youth of nuclear and joint families.

From the table 1. it is apparent that co-efficient of correlation ( $r=-0.08$ ) between farming experience and attitude of the respondents was found to be negative and non significantly related. The farming experience might not have changed the attitude of youth towards farming. The youth with low farming experience and high farming experience might be in the similar way of thinking resulted in non significant relationship.

The co-efficient of correlation ( $r=0.07$ ) from table 1. revealed that, there was a positive and non significant relationship between farm size and attitude of the youth towards farming at 0.05 level of significance. The youth in farming might be trying to utilize their available land and committed to produce maximum output from their available land holdings. Hence there was no significant relationship in their attitude among different levels of land holdings.

It could be derived from the table 1. that, the co-efficient of correlation ( $r=0.07$ ) between material possession and attitude of the respondents was positive and had shown non significant relationship. Even though the material possession is considered to be one of the most important factors for the success of farming, the youth in farming might not have perceived the need of such mechanization. This might be the reason for the above trend.

The results from above table conveyed that, the computed 'r' value ( $r=0.23$ ) had shown positive and significant relationship between annual income and attitude of youth towards farming. Income is crux to assess the quality of any occupation. As the youth in farming who are getting more income from farming might be in the opinion that farming is the best option to lead their life. On contrary, the farmers who are in the low income category might be thinking to shift from farming to choose the right alternative for earning. Bhanu (2006), Mosae and Ommani (2011), Anamica and Ravichandran (2014) supported the findings.

It could be derived from above table that, the computed 'r' value (0.14) inferred that there was a positive and significant relationship between exposure to training and attitude of the youth towards farming. Training is the means for an individual towards dynamism to face the required advancements in farming. The knowledge and skills gained in training might be helping the youth in farming towards adoption of innovative production technology which in turn led to quality production.

The coefficient of correlation ( $r=0.13$ ) from the above table projected that, there was a positive and non significant relationship between extension contact and attitude of the respondents at 0.05 level of significance. Youth in farming might be exploring all the possible means of the information sources for enriching their knowledge. Irrespective of having such contacts, the attitude of youth in farming might be influenced by other factors such as the income, prestige and so on.

It could be observed from the above table that, the coefficient of correlation value ( $r=0.22$ ) was more than the 'r' table value at 0.01 level of significance. So it would be confirmed that there was a positive and significant relationship between mass media exposure and attitude of youth towards farming. The present scenario of agricultural development is depending more on information and communication technology which is the best means to reach the farming community. The youth in farming who are efficient in utilizing such mass media tools might be receiving the information from the scientists or extension functionaries which might have helped youth to take up timely operations. Hence the mass media exposure might have resulted in better utilization of innovative technology leading to better production. The studies of Bhanu (2006) and Umunnakwe *et al.* (2014) pointed out the similar relationship between mass media exposure and attitude.

It is apparent from the above table that, the coefficient of correlation value ( $r=0.18$ ) had shown positive and significant relationship between decision making ability and attitude of youth towards farming. Right decision is the precursor for developing a right attitude. Decision making ability is one of the important qualities of youth in farming which decide the fate of agriculture. A farmer taking up right decision in right time might have resulted in remarkable farming in their farm ultimately lead to the development of positive attitude towards farming. In contrary, youth in farming with poor decision making ability might have experienced poor yield in farming which in turn lead to development of negative attitude.

It could be inferred from above table that, the coefficient of correlation value ( $r=0.41$ ) had shown positive and significant relationship between innovativeness and attitude of youth towards farming. Innovation is the key success factor for progressive development of any occupation. The quality of innovativeness will encourage the youth in farming towards adoption of modern technologies which replace age old technologies. This change might have reflected on the evolutionary impact in farm productivity. Hence innovation brought out significant profitability in farming. Innovative technologies might have been applied both in production and marketing of their farming by the youth. Uddin *et al.* (2008) and Ummunakwe *et al.* (2014) also noticed the positive and significant relation.

The computed 'r' value ( $r=0.43$ ) was more than the 'r' table value at 0.01 level of significance for scientific orientation. Hence, it is clear that, there was a positive and significant relationship between scientific orientation and attitude of youth towards farming. Science is the base for any act. One has to see the root cause of any operation. Comprehension and reasoning will help in developing the quality of high scientific orientation. Educated and dynamic youth in farming might be rigorously analyzed their activities for achieving success in their farming. The youth in farming with more scientific orientation might be more logical, reasonable and optimistic in adopting new technologies which have resulted in high success percentage. The education, knowledge and skills might have directly contributed for developing a positive attitude towards farming.

From the above table the coefficient of correlation value ( $r=0.39$ ) had shown positive and significant relationship between management orientation and attitude of youth towards farming. Effective utilization of all possible resources is vital in measuring the efficiency of any event. Management is such a tool which deserves tremendous output through smart work. Youth in farming, who utilize all such resources in all their phases of farming viz., planning, production and marketing might have realized remarkable returns from their farm work. This might have lead to the positive attitude towards farming.

The coefficient of correlation value ( $r=0.19$ ) was more than the 'r' table value at 0.01 level of significance. Thus, it is apparent from the above table that, there was a positive and significant relationship between achievement motivation and attitude of youth towards farming. n-Ach of an individual determines one's strength of success. Youth in farming with high achievement motivation might be courageous and had a high desire to set and achieve optimistic targets in their farming through committed and sincere efforts. They might have achieved their dreams which made them to develop more affinity towards farming. Bhanu (2006) and Mohan and Reddy (2012) supported the relationship but Anamica and Ravichandran (2014) findings were dissimilar with the current study.

It is viewed from the above table that, the coefficient of correlation value ( $r=0.54$ ) had shown positive and significant relationship between economic orientation and attitude of youth towards farming. In the present world, the income is the base for appraising any enterprise or any occupation. The continuous involvement, growth and development

create a positive attitude. During the course of time one might be in search of designing cost effective combinations with highest possible outputs. Hence the economic orientation might have shown a significant impact on the positive attitude towards farming. Bhanu (2006) expressed the similar result in their study.

The coefficient of correlation value ( $r=0.31$ ) apparently shown that, there was a positive and significant relationship between risk orientation and attitude of youth towards farming. Youth might be taking risk in performing activities in both production and marketing so as to get maximum returns. All such youth might have won their efforts by taking calculated risk. The amount of risk encountered by youth might have given back a many fold income in farming and in turn developed positive attitude towards farming. Anamica and Ravichandran (2014) reported negative and significant relationship at one per cent level of probability level.

### Combined Effect of All Independent Variables on Attitude of Youth Towards Farming

To determine the combined effect of all the selected independent variables in explaining variation in attitude of youth towards farming, Multiple Linear Regression analysis was carried out. The computed co-efficient of determination ( $R^2$ ) value and partial regression co-efficient (b) values with their corresponding 't' values were presented in table 2. The  $R^2$  and 'b' values were tested statistically for their significance.

The ' $R^2$ ' value was 0.409 which depicted that all the selected eighteen independent variables put together explained about 40.90 per cent variation in the attitude of youth towards farming and the variables selected for the study were relevant to the problem selected.

The partial regression coefficients presented in table 2. further revealed that the independent variables viz. farm size, annul income, decision making ability, innovativeness, achievement motivation and economic orientation were found positively significant as evident from their significant 't' values. This implied that these variables have contributed to most of the variation in the attitude of youth towards farming.

The 'F' value (8.020) was significant at 0.01 level. The prediction equation was fitted is as follows.

$$Y = 17.145 - 0.044 (X_1) + 0.002 (X_2) + 0.042 (X_3) + 0.062 (X_4) - 0.064 (X_5) + 0.147 (X_6) + 0.057 (X_7) + 0.219 (X_8) + 0.032 (X_9) - 0.082 (X_{10}) - 0.017 (X_{11}) + 0.122 (X_{12}) + 0.164 (X_{13}) + 0.052 (X_{14}) + 0.008 (X_{15}) + 0.101 (X_{16}) + 0.405 (X_{17}) + 0.009 (X_{18})$$

Out of the seventeen variables, annual income ( $X_8$ ) and economic orientation ( $X_{17}$ ) had shown positive significant contribution with the dependent variable 'attitude of youth towards farming' at 0.01 level, whereas variables like farm size ( $X_6$ ), decision making ability ( $X_{12}$ ), innovativeness ( $X_{13}$ ) and achievement motivation ( $X_{16}$ ) had shown positively significant contribution at five per cent level. The remaining variables had shown non significant contribution with the dependent variable.

This revealed that a unit increase in farm size, annual income, decision making ability, innovativeness, achievement motivation and economic orientation *ceteris paribus* would result in an increase in favorable attitude towards farming by 0.147, 0.219, 0.122, 0.164, 0.101 and 0.405 units respectively.

**Table 2: Multiple Linear Regression Analysis of the Selected Independent Variables with the Attitude of Youth Towards Farming**

S. No.	Variable	Std. Error	'B' Values	'T' Values	'P Values'
X <sub>1</sub>	Age	0.329	-0.044	-0.605 <sup>NS</sup>	0.546
X <sub>2</sub>	Education	1.126	0.002	0.023 <sup>NS</sup>	0.982
X <sub>3</sub>	Marital Status	3.979	0.042	0.666 <sup>NS</sup>	0.506
X <sub>4</sub>	Family Type	2.354	0.062	1.039 <sup>NS</sup>	0.300
X <sub>5</sub>	Farming Experience	0.224	-0.064	-0.966 <sup>NS</sup>	0.335
X <sub>6</sub>	Farm Size	0.653	-0.147	1.858 *	0.064
X <sub>7</sub>	Material Possession	0.812	0.057	1.037 <sup>NS</sup>	0.301
X <sub>8</sub>	Annual Income	0.535	0.219	2.694 **	0.008
X <sub>9</sub>	Exposure to Training	0.452	0.032	0.506 <sup>NS</sup>	0.613
X <sub>10</sub>	Extension Contact	0.471	-0.082	-1.257 <sup>NS</sup>	0.210
X <sub>11</sub>	Mass Media Exposure	0.428	-0.017	-0.263 <sup>NS</sup>	0.793
X <sub>12</sub>	Decision Making Ability	0.248	0.122	2.208 *	0.028
X <sub>13</sub>	Innovativeness	0.362	0.164	2.215 *	0.028
X <sub>14</sub>	Scientific Orientation	0.314	0.052	0.650 <sup>NS</sup>	0.516
X <sub>15</sub>	Management Orientation	0.188	0.008	0.113 <sup>NS</sup>	0.910
X <sub>16</sub>	Achievement Motivation	0.395	-0.101	1.808 *	0.072
X <sub>17</sub>	Economic Orientation	0.571	0.405	5.042 **	0.000
X <sub>18</sub>	Risk Orientation	0.545	0.009	0.139 <sup>NS</sup>	0.889

$R^2 = 0.409$   $F=8.020^{**}$  Constant=17.145 Significant at 0.01 level \* Significant at 0.05 level

NS Non significant

It could be observed from the table that among the six significantly contributing variables, annual income and economic orientation were found to contribute much on 'attitude of youth towards farming'. In general, increased annual income would enhance a favourable mindset towards farming. Similarly, economic orientation is positively related to the attitude of youth towards farming. The more the economic orientation, more would be the profits from the farm output and this would probably lead to possess a positive attitude towards farming.

When discussing about the other contributing variables, farm size would enhance a favourable mindset towards agriculture. Increased income because of increased farm size would be the reason behind the development of favourable attitude. Right decision making ability would lead to success in life as such it might have contributed to favourable attitude towards farming. Pertaining to innovativeness, more the innovativeness more would be the rural youth's intention to try advanced and cost effective technologies in order to flourish in farming. Strong achievement motivation might enhance an individual to earn more income and profit from the farming. Better achievement motivation also might pave way for the comfortable risk management endeavour. Thus all the above variables of the youth would positively influence their attitude towards farming.

## CONCLUSIONS

In order to divert the youth involvement in farming different stakeholders of farming community should focus on the different economical and psychological characteristics which influence youth towards positive attitude on farming. On the other side youth must concentrate on development of their cognitive and psychomotor domains which in turn lead to productive human resource of the farming community. Further this contributes to the development of the Nation.



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